DEPARTMENT OF STATISTICS AND ACTUARIAL SCIENCE
THE UNIVERSITY OF HONG KONG

Departmental Seminar

Dr. Thomas FUNG

Department of Mathematics and Statistics
Macquarie University
Sydney, Australia

will give a talk
entitled

MODELLING DISPERSED COUNT WITH MEAN-PARAMETRIZED CONWAY-MAXWELL-POISSON (MPCMP)

Abstract

Conway-Maxwell-Poisson (CMP) distributions are flexible generalizations of the Poisson distribution for modelling overdispersed or underdispersed counts. The main hindrance to their wider use in practice seems to be the inability to directly model the mean of counts, making them not compatible with nor comparable to competing count regression models, such as the log-linear Poisson, negative-binomial or generalized Poisson regression models. In this talk, we will illustrates how CMP distributions can be parametrized via the mean, so that simpler and more easily interpretable mean-models can be used, such as a log-linear model. Moreover, this talk introduces the R package which provides a collection of functions for estimation, testing and diagnostic checking for the proposed model. The performance of the R routine against the earlier proposed MATLAB routine will also be discussed. This talk represents some joint work with Alan Huang, Aya Alwan and Justin Wishart.

on

Thursday, October 11, 2018

(Refreshments will be served from 3:15 p.m. outside Room 301 Run Run Shaw Building)

3:30 p.m. – 4:30 p.m.

at

Room 301, Run Run Shaw Building

Visitors Please Note that the University has limited parking space. If you are driving please call the Department at 3917 2466 for parking arrangement.

All interested are welcome